

ABSTRACT

The number of write circuit components, variations in a write current flowing through each write line, and the power consumption for write operation can be reduced. A first constant current circuit and a second constant current circuit (a transistor (Q8) and a resistor (R4), and a transistor (Q7) and a resistor (R3)) are shared among a plurality of current direction control portions (54n-1, 54n, 54n+1, ...). The constant current circuits are connected to each current direction control portion (54) through a first circuit selector switch (SW1..., SW1n, SW1n+1, ...) and a second circuit selector switch (SW2..., SW2n, SW2n+1, ...) disposed for each current direction control portion (54). Moreover, a decode signal voltage is applied to the constant current circuits from a word decode line (16X) (bit decode line (16Y)) through the circuit selector switches (SW1) and (SW2).